For Research Use Only

CoraLite® Plus 488-conjugated ATF4 Monoclonal antibody

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Purification Method:

Catalog Number: CL488-60035

Basic Information

Catalog Number: GenBank Accession Number:

CL488-60035 BC022088 Protein G purification

GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 ug/ml by 468 3E4C5

Nanodrop: **UNIPROT ID:** Recommended Dilutions: P18848 IF/ICC 1:50-1:500

Mouse Full Name: Excitation/Emission maxima

Isotype: activating transcription factor 4 (tax- wavelengths: responsive enhancer element B67) 493 nm / 522 nm lgG1

Immunogen Catalog Number: Calculated MW:

AG1279 39 kDa

> Observed MW: 45-50 kDa

Applications

Positive Controls: **Tested Applications:** IF/ICC, FC (Intra) IF/ICC: HeLa cells,

Species Specificity: human, mouse

Background Information

ATF4 is a transcription factor, that accumulates predominantly in osteoblasts, where it regulates terminal osteoblastdifferentiation and bone formation. As a basic leucine-zipper (bZip) transcription factor, ATF4 can regulate amino acid metabolism, cellular redox state, and anti-stress responses. It also regulates age-related and diet-induced obesity and glucose homeostasis in mammals, and has conserved metabolic functions in flies. Due to its location at chromosome 22q13, a region linked to schizophrenia, ATF4 is considered as a positional candidate gene for schizophrenia. Otherwise, since ATF4 is induced by tumour microenvironmental factors, and regulates processes relevant to cancer progression, it might serve as a potential therapeutic target in cancer. This antibody is a mouse monoclonal antibody raised against full length human ATF4 antigen. The antibody recognizes the 38 kd ATF4 protein and its phosphorylated forms (50 kd). This antibody is conjugated with CL488, Ex/Em 488 nm/515 nm.

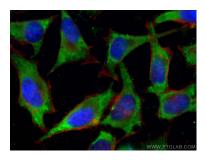
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

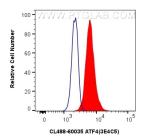
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using CoraLite® Plus 488 ATF4 antibody (CL488-60035, Clone: 3E4C5) at dilution of 1:200, CL594-phalloidin (red).



1X10^6 HeLa cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human ATF4 (CL488-60035, Clone:3E4C5) (red), or 0.8 ug CoraLite® Plus 488 Mouse IgG1 Isotype Control (MOPC-21) (CL488-65124, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.